CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ITEM NO. 11

TENTATIVE WASTE DISCHARGE REQUIREMENTS
FOR THE CITY OF OCEANSIDE
SAN LUIS REY AND LA SALINA WASTEWATER TREATMENT PLANTS
AND BRACKISH GROUNDWATER DESALINATION FACILITY
DISCHARGE TO THE PACIFIC OCEAN VIA THE OCEANSIDE OCEAN OUTFALL

RESPONSES TO COMMENTS FROM INTERESTED PARTIES

Comment #	Comment	Staff Response
Comments from City of Oceanside contained in correspondence dated July 20, 2005		
1	Page 11 – IV.B.1. The requirement for CBOD, Total Suspended Solids and 85% removal to be determined separately for each secondary plant, creates a situation where maintenance and repairs will cause violations. For over 30 years, the combined effluent from our two secondary treatment plants has been used to determine compliance with discharge limitations. Both plants are under the supervision and control of the City of Oceanside and discharge to one outfall. At times it has been necessary to bypass the secondary treatment portion of part of our treatment system during planned maintenance, repairs and upgrades. The blended discharge has always complied with discharge limitations. During the next five years of this permit it will be necessary to bypass a part of the secondary treatment system at the La Salina Wastewater Treatment Plant (LSWWTP) in order to replace a drive unit. The City is also contracting with an engineering firm to look at repairing the secondary tank	The CBOD, TSS and percent removal requirements are secondary treatment standards required under 40 CFR 133. These technology-based standards for wastewater treatment plants are intended to require a minimum level of treatment based on currently available treatment technologies. Under the Discharger's NPDES permit, Order No. 2000-011, the compliance point for secondary treatment standards for the discharger's discharge has been at a single point on the Oceanside Ocean Outfall after wastewater discharges from the discharger's San Luis Rey and La Salina wastewater treatment plants and brine discharge from the discharger's Brackish Groundwater Desalination Facility have commingled. As such, this compliance point does not allow independent determination of each wastewater treatment plant's compliance with the secondary treatment standards. While the Regional Water Board did not always apply

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	structure. Both projects are planned for the summer of 2006. Failure to do these projects will ultimately lead to catastrophic failure of the treatment system and severe property damage. Our system permit over the last 30 years has allowed us to maintain our system as well as stay in compliance with no environmental degradation. We have planned our maintenance with this in mind. These large projects cannot be accomplished by using auxiliary treatment facilities or retention of untreated waste. The City asks that compliance continue being based on our combined discharge from our two facilities as is currently being done for the four treatment plants at Camp Pendleton under Permit No. R9-2003-0155. An alternative approach would be to allow the bypassing under Attachment D – I.D.3. or 4. on page D-3 where enforcement actions are not taken. Determination of compliance separately for percent removal is also mentioned on page 29 under VII.H. and in the sampling locations in II. Table 1. on page E-3.	the secondary treatment standards at each wastewater treatment plant for multiple treatment plants discharging to a single ocean outfall, it has moved towards the proper application of the secondary standards to each plant as opportunities to amend or renew permits arise. In December 2004, the Regional Board adopted a permit amendment for the South Orange County Wastewater Authority (SOCWA) which requires compliance with the secondary treatment standards at each of SOCWA's wastewater treatment plants that discharge through the Aliso Creek Ocean Outfall. By correspondence dated December 8, 2004, USEPA Region 9 supported the Regional Water Board's action on the SOCWA permit and stated that "the effluent should be measured and compliance determined subsequent to secondary treatment at each treatment plant." USEPA Region 9 further stated that "technology-based requirements are to be met with treatment technology, not non-treatment such as flow augmentation (40 CRF 125.3(f)) or dilution that could occur as various effluents mix in the outfall." For these reasons, the Regional Board cannot accommodate the discharger's request to continue compliance determination based on its combined discharge from its three facilities at a single compliance point on a permanent basis. Bypasses at treatment facilities that may or do result in exceedance of effluent limitations are prohibited unless the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage and there were no feasible alternatives to the bypass (see Standard Provision I.G.3, Prohibition of Bypass, in Attachment D of the tentative Order). Previous bypasses of treatment facilities conducted by

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		the Discharger for planned maintenance, repairs and upgrades were not prohibited and did not result in violations of Order No. 2000-011. The discharge during those bypass periods complied with the technology-based standards as determined at the single compliance point at the ocean outfall and additional effluent and receiving water monitoring indicated compliance with other requirements of Order No. 2000-011 and did not result in any observable negative impacts to the receiving water. An errata sheet to tentative Order No.R9-2005-0136 has been prepared which will add provisions that address the specific case of future anticipated bypasses at the La Salina treatment plant due to planned maintenance, repairs and upgrades. Those additional provisions will allow the Regional Board to determine if the anticipated bypass is not prohibited according to the requirements of Standard Provision I.G.3, and require compliance at a single compliance point at the ocean outfall and additional effluent and receiving water monitoring during the bypass periods.

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2	Page 12 – IV.B.2.Table 7b. – Starting with Acrolein, all of the parameters listed under Table 7b. with Average Monthly Effluent Limitations, with the exception of Tributyltin, should be performance goals. Most of the parameters have never been detected in our effluent or if detected, they were at levels well below effluent limitations with the exception of those parameters where the detection limit was greater than the limitation. A reasonable potential analysis (RPA) should have been done for all of these parameters and the results should have been to move them to the performance goal list. This group of parameters has been included in our monitoring for the last 30 years so sufficient data should be available. After asking why the parameters were included in this permit as effluent limitations, I was told that there was insufficient data to perform the calculation so the parameters fall under Endpoint 3, the RPA is inconclusive and monitoring is required. Apparently and unknown to the dischargers, sixteen data points are necessary for the calculation but the monitoring is only required on a semiannual basis. Regional Board staff has chosen to only use the most recent last 4 years of data even though there are many years of data points from approved testing methods available. This approach is questionable at best.	The State Water Board adopted amendments to the California Ocean Plan on April 21, 2005 which added reasonable potential analysis (RPA) procedures for determining which constituents have reasonable potential to cause an exceedance of water quality objectives based on effluent quality data. The RPA procedures include parametric statistical procedures to analyze effluent quality data when less than 80% of the data are below detection limits of analytical methods and non-parametric statistical procedures to analyze effluent when greater than 80% of the data that are below detection limits. The RPA can yield three endpoints: 1) Endpoint 1, an effluent limitation is required and monitoring is required; 2) Endpoint 2, an effluent limitation is not required and the Regional Water Board may require monitoring; and 3) Endpoint 3, the RPA is inconclusive, monitoring is required, and an existing effluent limitation may be retained or a permit reopener clause is included to allow inclusion of an effluent limitation if future monitoring warrants the inclusion. Endpoint 3 is the RPA result of the non-parametric statistical procedures when effluent quality data, as adjusted to account for the initial dilution factor, are all below the analytical detection limits and there are less than 16 data points total. RPcalc 2.0 is a software tool developed by the State Water Board to implement the adopted RPA procedures including both the parametric and non-parametric statistical procedures. Data for the period July 1999 through June 2004, a period of five years (not four years), was used for conducting RPA. However, for certain constituents that were only monitored twice a year, there were only ten data points within the five-year period. Older data was not used in the RPA in order to reflect as much as

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		possible the conditions that exist today. For example, analytical methods and detection limits have changed, and effluent quality may be different due to new industries discharging to the treatment facilities and upgrades and other changes to the treatment facilities. Because the RPA amendments of the Ocean Plan allow the Regional Board discretion in including effluent limitations for constituents with RPA Endpoint 3, an errata sheet has been prepared to amend the tentative Order to remove effluent limitations for Endpoint 3 constituents and replace them with a corresponding performance goal. Section C.3 of the Fact Sheet includes the statement "Constituents that did not have enough data to run an RPA have retained their effluent limitations from Order No. 2000-011" which is inaccurate because an RPA analysis was run for all constituents using all available data; however, Endpoint 3 was the RPA result for certain constituents as explained above. To reflect the replacement of effluent limitations with performance goals for Endpoint 3 constituents, the errata sheet includes a correction to the Fact Sheet statement. The correction reads "Effluent limitations from Order No. 2000-011 are not retained for constituents for which RPA results indicated Endpoint 3; performance goals have instead also been assigned for these constituents."

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3	Page 21 – VI.C.2.a. Oceanside Ocean Outfall Capacity No later than 180 days prior to the Order's expiration date, the Discharger shall submit a written report to the Executive Officer regarding capacity of the Oceanside Ocean Outfall (OOO) that addresses the following items: 1) Most current report on OOO capacity conducted within 365 days of the expiration date of this Order (June 8, 2010). The two statements together would require the outfall capacity study to be done during the first 180 days of the last year of the permit. The narrow time window is not necessary. We are currently doing a detailed capacity study on the outfall. The resulting information will be valid for the life of this five year permit. We ask that the Board drop the second half of the sentence "conducted within 365 days of the expiration date of this Order (June 8, 2010)" and allow submittal of the current study.	The intent of the provision IV.C.2.a was to require the discharger to submit information that reflected the condition of the ocean outfall during the permit cycle. Staff concurs that a capacity study completed during the permit cycle is acceptable. The errata sheet includes a modification to provision IV.C.2.a (1) that would allow the Discharger to submit a report based on a capacity study that was completed within four and a half years after the adoption of the tentative Order.
4	Page 28 and 29 – VII.A., B., F. The definitions in the Compliance Determination Standards for average monthly effluent limitation, average weekly effluent limitation and six-month median limitation allows for 30, 7 and 180 violations respectively to be assessed for a single exceedance. This could result in fines of $90,000, $21,000 and $540,000 for this single occurrence and most likely would double when mass limitations violations are considered. This approach has not been consistently applied top all dischargers are indicated by the recent Complaint No. R9-2005-0083 for the City of San Diego. Monthly average violations were treated as a single incident and there were no mass	In the past, permits did not provide the necessary clarification regarding how violations will be determined and counted which led to much confusion and inconsistency. In the absence of such guidance, the Regional Board members in previous enforcements actions with monetary penalties concluded that violations be determined and counted in the manner that resulted in the smallest penalty to be fair to the Discharger. The definitions now included in the Compliance Determination section provide the necessary clarification. Compliance with the Average monthly effluent limitation (AMEL) and Average weekly effluent limitation (AWEL)

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	limitation violations mentioned. The CDS language in our draft permit has no factual findings to support the approach in Attachment F. The approach is excessive and allows for unreasonable taking of moneys necessary for the operation of a municipal program. The daily maximum is the correct limit for daily limits. Treating average weekly, monthly and six-month median limitations as daily violations does not seem correct or fair. The weekly, monthly and six-month median limitations are lower because they are averaged over a longer period of time. By treating weekly average limitation violations as seven days of violations, the limitations have become daily maximums. Considering the potential fines resulting from this language change, a further discussion is necessary. The recently approved Order No. R9-2005-0100 for San Elijo did not adopt these Compliance Determination Standards. It is our understanding that an administrative rule making by the Board will be necessary to formally adopt the standards. Statewide consistency and reasonableness should be the goal	is determined by calculating the average of sample results representing a day (i.e., daily discharge) during a calendar month or calendar week (Sunday through Saturday). Ideally, each day of the month (or week) should be represented with a sample result when calculating the average; however, actual required monitoring frequencies are less frequent than daily in the interest of reducing monitoring and analysis efforts and costs of the Discharger. Nonetheless, the practice of calculating averages with a sample of data points to represent the average of the entire data population is a valid statistical concept. The Regional Board holds the position that a discharge must comply with the AMEL and AWEL on each day of discharge. However, determination of compliance with the AMEL and AWEL cannot be done on a daily basis as each day is completed because, by its nature, the monthly average or weekly average are calculated parameters that cannot be calculated until all the samples that will be taken in a month or week have been taken and analyzed. As an example, a discharge that occurs on the first day of the month must comply with the AMEL; however, taking a sample on the first day of the month does not provide enough information by itself to determine whether the discharge has complied with the AMEL because future discharges in the month have not yet occurred and been sampled that could cause the monthly average to exceed or show compliance with the AMEL. Once all sample results for the month are available, the monthly average can be calculated and compared to the AMEL at which point a compliance determination can retroactively be made regarding the discharge on each day. The USEPA Memorandum “Issuance of Guidance

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		Interpreting Single Operational Upset" (September 27, 1989) provides guidance on counting violations of monthly or weekly average discharge limits. It states that "The violation of a monthly average limitation is counted as one day of violation for each day in the month, e.g. 30 days of violation in a 30 day month. See Gwaltney of Smithfield v. Chesapeake Bay Foundation, 791 F. 2d 304, 314-15 (4th Cir. 1986)." The definitions of AMEL, AWEL and the six-month median effluent limitations are consistent with USEPA's guidance document. Some non-conventional pollutants may be assigned a six-month median effluent limitation but only required to be monitored quarterly. In those cases, the median is the average of results from the two required monitoring events and is compared to the limitation for compliance determination. If the observed median exceeds the limitation, the discharger is not precluded from conducting more frequent monitoring within each quarter to demonstrate that the median does not exceed the limitation. Other non-conventional pollutants may be assigned AMELs but only required to be monitored semiannually. In those cases, the single result is considered the monthly average only for the month in which the sample was taken. If the observed average based on the single monitoring exceeds the limitation, the discharger is not precluded from conducting more frequent monitoring within that month to demonstrate that the average does not exceed the limitation. The discharger is not precluded from monitoring the effluent early during each monitoring period (e.g., month

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		or quarter) in order to allow more sampling later in the monitoring period if necessary. However, if more frequent monitoring is conducted, results from those additional monitoring may still indicate exceedance of effluent limitations. The recently adopted Order No. R9-2005-0100 for San Elijo did include the Compliance Determination provisions for AMEL, AWE, and six-month median limitation. The Regional Board holds that an administrative rule making by the Board is not required to formally adopt these Compliance Determination provisions. Additionally, the Regional Board has contacted the State Water Board on this matter and the State Water Board has not yet provided any statewide guidance on this issue.
5	Page E-3 – II.Table 1. Shore stations S-6 and S-7 are located in Carlsbad near Beech and Pine Street respectively. The County of San Diego Department of Environmental Health (DEH) discontinued sampling a shore station located at Pine Street after two years of no exceedances of state standards. Samples were taken once a week from April 1st through October 31st during April 2002 to June 2004. Currently, DEH has a shore station located at Carlsbad Village Drive which is between the proposed S-6 and S-7 stations. There have been no exceedances during dry weather at Carlsbad Village Drive since monitoring started there in April 1999. There is no need for additional shore stations. The City suggests staying with the locations from our current permit (S-1 through S-5), all of which are within the borders of the City of Oceanside. The only suggestion for change would be to relocate any of the five current stations further from	The Regional Board agrees with the comment. The errata sheet to tentative Order No.R9-2005-0136 will re-establish surf zone monitoring station S1 located 5,500 ft south of the outfall and the corresponding near shore monitoring station N1. Proposed monitoring stations S6, S7, N6 and N7 will be eliminated. By e-mail communications on May 16, 2005 and August 3, 2005, the County of San Diego Department of Environmental Health has indicated that it has no objections to the original proposal to remove station N1 and establish the two prososed stations or to the current proposal to retain station N1 and not establish the two proposed stations.

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	storm drains to allow for less effect from surface runoff.Stations S-6 and S-7 are unnecessary and would cause conflict between two municipalities. Every exceedance no matter what the cause would be blamed on the Oceanside Ocean Outfall. Major storm drains are located at Carlsbad Village Drive and Pine Street so the potential for wet weather exceedances exist. DEH would require posting of beaches that exceed state limits. Oceanside would be required to resample posted beaches or pay DEH to do so within Carlsbad's city limits. There is no supporting data to suggest that our effluent is causing water quality exceedances in Carlsbad. Our S-1 station, located just north of the mouth of Buena Vista Lagoon at the southern city limit and our near shore station N-1 located opposite S-1 at the 30 foot depth contour has no history of exceeding water quality limits with the exception of during heavy discharges from the lagoon. Conversation with Regional Board staff indicated that there was a desire on our part to get rid of our S-1 station so the replacement stations were created. That is not the case.The City of Oceanside has for many years voluntarily sampled five extra shore stations located north of the five S stations in order to cover the entire length of Oceanside's coastal limits.	
6	Page E-10 - VI.B. and C. Near Shore and Off Shore Water Quality Monitoring - Regional Board staff indicated that the tables from the last permit would be inserted to continue with the reduced and intensive monitoring programs. The level of effort in the draft permit in Table 6 and 7 reflects the intensive monitoring program and would be required during the 12-month period of July 1, 2008 through June 30, 2009. This is consistent with other dischargers in our area.	The errata sheet to tentative Order No.R9-2005-0136 will amend the Monitoring and Reporting Program to re-establish reduced and intensive monitoring programs for near shore and off shore monitoring stations.

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7	Page E-11 and 12 – VI.E. The requirement for Demersal Fish and Macroinvertebrates identified as Biological Transects is a carryover from the 1978 original ocean monitoring requirements. The work requires a diver to identify large plants and animals and take pictures as they go up every 20' from the bottom to 20' from the surface. It involves a single station near the outfall and two reference stations. The results are pictures of blue water and maybe a fish if they are lucky. It is a waste of time and money and will not result in any usable data. Ken Schiff, of SCCWRP, does not support the use of this method and did not include it in your monitoring program for small POTWs document recently developed by SCCWRP. The City suggests adding trawls and deleting the biological transects. Changes in this program would require the monitoring locations T0, T1 and T2 on page E-4 to be changed as well unless they are incorporated into trawling stations.	The Regional Board has considered the comment and determined that additional time is necessary to evaluate the value of Demersal Fish and Macroinvertebrates monitoring and to determine an appropriate alternative if necessary. The requirement is being retained in the permit until the Regional Board has had adequate time to consider this issue. The Regional Board intends to revisit the need for improved receiving water monitoring in the near future. Recently, the Southern California Coastal Waster Research Project (SCCWRP) provided the Regional Board guidelines for improving monitoring programs for the Region's ocean dischargers. The Regional Board will use these guidelines to make appropriate modifications to the receiving water monitoring programs.

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8	Page E-13 – VI.I. Plume Tracking Studies - The Draft Permit requires that Oceanside implement a significant new and potentially expensive plume tracking study intended to monitor the outfall plume, wet weather runoff from the San Luis Rey River and Buena Vista Lagoon and any stormwater plumes. The objective and goals of the plume tracking study are not clearly stated and only described in very broad and general terms. Yet the study calls for state-of-the-art remote sensing monitoring program. Moreover, the RWQCB staff have not provided any background or rationale in order to require such a highly technological and extensive approach for tracking the plume movement. Oceanside has participated in numerous water column tests including bacterial tests, shoreline bacterial monitoring, and intensive receiving water monitoring; and none of these tests indicate that the plume has a tendency to reach the shoreline or negatively impact the receiving water environment. This new approach to monitoring raises serious questions about its technical validity which have yet to be resolved. During the April 25, 2005 meeting, Regional Board staff concurred that, rather than imposing these new monitoring requirements on San Elijo JPA through the Draft Permit, the Regional Board should host a workshop to receive input from the public, the regulated community and SCCWRP to develop a meaningful regional monitoring plan. The final adopted Permit for San Elijo JPA did not have a plume study requirement. Oceanside requests the same treatment for the same reasons.	The errata sheet for tentative Order No. R9-2005-0136 will remove the requirement for Plume Tracking Studies. The Regional Board intends to revisit the need for improved receiving water monitoring in the near future. Recently, the Southern California Coastal Waster Research Project (SCCWRP) provided the Regional Board guidelines for improving monitoring programs for the Region's ocean dischargers. The Regional Board will use these guidelines to make appropriate modifications to the receiving water monitoring programs.

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9	Page E-13 – VI.J. Determination of Compliance with Water Quality Objectives – As is the case with the Plume Tracking Studies, this new program is a regional project and not one that a single City should be asked to perform individually. The study asks for a feasibility determination for the monitoring of the receiving waters at offshore stations for the Oceanside Ocean Outfall for each of the pollutants listed under Table B to determine compliance with water quality objectives. The purpose of the Draft Monitoring and Reporting Plan included in this permit is to confirm that the effluent limitations in the Draft Permit are sufficient to protect the beneficial uses of the receiving water in the Ocean Plan. It is the duty of the regional boards to insure the water quality of the receiving water by the use of limits imposed upon the discharger's effluents. Monitoring of the receiving water for certain constituents is not within the scope of the discharger's responsibility as they are already required to comply with effluent limitations for those constituents. Nor is the discharger in any position to develop the necessary resources to carry out what is essentially a research project for, and at the behest of the regional board. No other agency with the exception of Fallbrook has been asked to develop this program including the City of San Diego, a discharger of primary effluent. This additional requirement and cost cannot be supported by Oceanside's excellent prior compliance history. The proposal suggests using methods other than the standard approved methods (40 CFR Part 136) required for our current monitoring. Compliance with the Ocean Plan requires the use of these approved methods. This	The errata sheet for tentative Order No. R9-2005-0136 will remove the requirement for Determination of Compliance with Water Quality Objectives. The Regional Board intends to revisit the need for improved receiving water monitoring in the near future. Recently, the Southern California Coastal Waster Research Project (SCCWRP) provided the Regional Board guidelines for improving monitoring programs for the Region's ocean dischargers. The Regional Board will use these guidelines to make appropriate modifications to the receiving water monitoring programs.

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	program should really be considered through a Regional workshop involving all outfall dischargers, SCCWRP, Regional Board staff and the public before being proposed as new provisions in a Draft Permit.	
10	Page E-16 – VII.B.4. Minimum Levels The Environmental Laboratory Accreditation Program (ELAP) should be included in the implementation of the Minimum Level (ML) program. The ML program will require significant modifications to laboratory calibration and reporting procedures when analyzing for NPDES parameters. The inclusion of ELAP in the administration of the ML program will help establish common terms and reduce redundancy between the different regulatory programs. (ML, DLR, PQL, RL). It is also required that the discharger instruct its labs to use ML protocols. ELAP is best qualified to ensure that laboratories adhere to the specific requirements of the ML program rather than the individual discharger. The essential elements of the ML program are not currently part of the ELAP certification process. A lab that is state certified does not mean that the lab is following ML protocols. Dischargers are required to use state certified labs and will expect that the data generated by such a lab will be acceptable for reporting to other state agencies	ELAP is required by law to certify laboratories so that they can report data in conformance with applicable environmental and public health requirements. ELAP has been informed of the Minimum Level and its implication to the laboratory community. Currently, ELAP auditors are informing laboratories that their minimum quantification value is equal to the lowest standard in the calibration curve, which is the definition of a Minimum Level in the State's Ocean Plan. ELAP is, however, not in a position to direct the definitions and meanings of various reporting limits as they are properties of reporting, which only the applicable regulatory agency can dictate. We have Minimum Levels and Reporting Limits while the Department of Drinking Water and Environmental Management has the Detection Limit for Reporting purposes (DLR). Each agency derives its reporting limits based on its needs and authorities. For example, US EPA allows the setting of drinking water reporting limits based on measurement technology limitations whereas it does not allow NPDES permit limits to be set in this fashion, but based on water quality standards. ELAP sees that laboratories are informed of each of these terms and their meaning as it applies to the various environmental or public health reporting criteria.

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11	Page F-20 - IV.C.5. Whole Effluent Toxicity – The City agrees with the statement in the second paragraph that says "There is no requirement to monitor for acute toxicity for discharges with minimum initial dilution factors below 100." The requirement to test for acute toxicity based on reasonable potential is not supported by all of the data that has been generated since the City performed the Toxicity Identification Evaluation (TIE) in 2003. After ammonia was confirmed to be the cause of the acute toxicity, the city imposed ammonia discharge limits on all industrial dischargers in the City. The main discharger for ammonia was Hydranautics. The City imposed a contribution permit to limit their ammonia discharge. In 2004, the San Luis Rey WWTP added additional secondary treatment capacity, which reduced the ammonia in the effluent. Since April 2003, the effluent has not exceeded the acute toxicity limits of our current Order No. 2000-011. The reasonable potential calculation that added the requirement for acute toxicity in this Draft Permit was based, in the opinion of the City, on a single outlier measurement. With the exception of the single acute toxicity value of 3.09, the second highest value for acute toxicity from all tests performed between January 1999 and June 2005 is 1.62 TU. The City requests that only chronic toxicity be included in this Draft Permit. This is supported by the 2001 Ocean Plan language under page 13 - III.C.3.c.(4) "Dischargers shall conduct chronic toxicity testing if the minimum initial dilution of the effluent falls below 100:1 at the edge of the mixing zone." The minimum initial dilution of the effluent for the Oceanside Ocean Outfall is 87:1. Removing acute toxicity language would affect pages 12, 32, E-7, F-8, F-20, F-21 and F-30.	The 2001 Ocean Plan established an acute toxicity water quality objective as well as a schedule for toxicity monitoring. The Regional Board understands the 2001 Ocean Plan as establishing a schedule based on dilution factors for when dischargers will be required to monitor for acute toxicity and chronic toxicity but not a schedule establishing when an acute toxicity or chronic toxicity effluent limitation may be included in the permit. The State Water Board's response to Comment 1.1 in the September 2000 Draft Final Functional Equivalent Document that was prepared when the 2001 Ocean Plan was being adopted states "if the SWRCB adopts the proposed acute toxicity water quality objective, the RWQCBs will use Section 122.44 (d)(1) on a permit-specific basis to determine whether they must include an effluent limit based on the objective." Section 122.44 (d)(1) of the Code of Federal Regulations requires that effluent limitations be included in permits when reasonable potential is demonstrated. In April 2005, the State Water Board formally adopted reasonable potential analysis (RPA) procedures for the Ocean Plan. The monitoring schedule based on dilution factors and the RPA procedures, since they were incorporated into the Ocean Plan at different times, could present a situation where the need for an acute toxicity effluent limitation is indicated by RPA but the monitoring schedule does not require acute toxicity monitoring due to a dilution factor less than 100, or conversely, requiring chronic toxicity monitoring without a chronic toxicity limitation. Also, if acute toxicity monitoring is not required, then data may not be available in the future to conduct future RPA. These are issues that need to be

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		addressed by the State Water Board. The Regional Board initially conducted a reasonable potential analysis for acute toxicity as according to Appendix VI Step 13 of the RPA amendments to the Ocean Plan using acute toxicity data collected by the Discharger during the period July 1999 through June 2004. The Regional Board has re-evaluated the acute toxicity data used in the RPA that indicated the need for an acute toxicity effluent limitation in the tentative Order. The Regional Board agrees that the observed toxicity value of 3.09 is an exceptional result and is not typical for the discharged effluent. Furthermore, the Regional Board recognizes that the Discharger has taken significant steps since April 2003 to reduce toxicity in its effluent and that it would be appropriate to only consider data after April 2003 in conducting RPA since that data is more representative of the Discharger's current wastewater influent and treatment operations. RPA conducted using only data from June 2003 through May 2005 did not indicate reasonable potential to cause an exceedance of the acute toxicity water quality objective, and therefore, an acute toxicity effluent limitation is not required. The errata sheet will amend the tentative Order to remove the acute toxicity effluent limitation. Some monitoring for acute toxicity is retained in the permit in order to ensure that changes implemented by the discharger to reduce acute toxicity remain effective and to ensure data will be available to conduct RPA in the future. The errata sheet will revise the monitoring frequency for acute toxicity to semiannual from quarterly.

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12	*The Discharger submitted additional comments listed as Typographical Errors, Omissions, and Suggested Changes Items 1 through 57 (page 8-11 of the Discharger's comment letter) and Methodology and Limits Items 1-10 (page 12). These comments, with the exception of Items 15, 16, 17, 27, 28, 31, 32, 39, 41, 45, 50, 52, 53, 54 and 55 on pages 8-11, and Items 5,6,7,9 and 10, are not reproduced in this Response to Comments and the reader is referred to the Discharger's comment letter directly.*	With the exception of Items 15, 16, 17, 27, 28, 31, 32, 39, 41, 45, 50, 52, 53, 54 and 55 on pages 8-11 and Items 5, 6, 7, 9 and 10 on page 12, these comments were minor changes in nature and did not substantially affect the intent of the tentative Order. These items have been corrected or addressed as suggested by the Discharger.
13	Page 8-11, Item 15: Page 33 – VII.M. The instructions for additional toxicity tests due to an exceedance seem to assume a monthly rather than quarterly frequency per MRP V. The last paragraph "If toxicity performance goals identified in Section V.B.2 of this Order are exceeded, then within 15 days of the exceedance, the Discharger shall begin conducting six additional toxicity tests over a 6-month (at least one sample per calendar month, for a total of two samples per calendar month) period and provide the results to the Regional Water Board." is incorrect. The original testing is required quarterly so it would not result in two samples per month.	The Regional Board intended to require the Discharger to increase its regular toxicity monitoring frequency to monthly if toxicity effluent limitations or performance goals are exceeded. The errata will correct the tentative Order to reflect this.
14	Page 8-11, Item 16: Page 34 – M. "Within fifteen days of completion of the TRE/TIE." There needs to be some time given for reporting and notification.	The errata sheet will modify the tentative Order to allow the Discharger to submit the results of the TRE/TIE within 30 days of completion of the TRE/TIE.

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15	Page 8-11, Item 17: Page 35 – Q.2. " Detection methods used for enterococcus shall be those presented in USEPA publication USEPA 600/4-85/076, 40 CFR 136, and any other approved method approved by the Regional Water Board. Test Methods for Escherichia coli and Enterococci in Water by Membrane Filter Procedure or any improved method determined by the Regional Water Board to be appropriate." Poorly written – redundant. The last sentence makes no sense.	The errata sheet will modify the tentative Order to correct the last sentence.
16	Page 8-11, Item 27: Page E-3 – II. Monitoring Locations. This chart does not specify the IDEC brine line under the Outfall 001 discharge point.	The errata sheet will modify the tentative Order to include the IDEC brine line as part of the Discharger's effluent at Outfall 0011 Monitoring Station M-003.
	Page 8-11, Item 28: Page E-5 – IV.Table 3a. – The requirements for sampling Oil and Grease and Settleable Solids at location M-001 and M-002 need to be changed to M-003 to agree with the Effluent Limitations listed on page 12 under IV.B.Table 7b. These should be determined on the combined effluent to the ocean outfall.	The errata sheet will modify the tentative Order to require that the effluent must comply with oil and grease and settleable solids effluent limitations at Outfall 001Monitoring Station M-003.
	Page 8-11, Item 31: Page E-13 – H. Intensive Monitoring. Years 1 and 3 are listed but on page F-34 years 2 and 4 are required. It is our understanding that the Intensive Monitoring will be required for a 12-month period beginning July 1, 2008 through June 30, 2009. References to years 1 and 3 or 2 and 4 are incorrect. The City suggests using the same language as	The Regional Board intended to require the Discharger to conduct intensive monitoring at the nearshore and off-shore receiving water monitoring stations in Year 4 of the Order and in addition participate in the SCCWRP Bight Study in Year 5 of the Order. The errata sheet will amend the tentative Order to reflect this.

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	was used in the San Elijo Permit on page E-13 under Section VI.H. "The Discharger shall perform the intensive monitoring as described by this MRP in conjunction with the Southern California Coastal Water Research Project (SCCWRP) Bight Study."	
	Page 8-11, Item 32: Page E-15 – A. 6. It is our understanding that "practical quantitation limits (PQL) is no longer required.	The errata sheet will correct the tentative Order to remove reference to practical quantitation limits and PQLs.
	Page 8-11, Item 39: Page F-7 – Table 4. The CBOD, and TSS maximum discharge values and mean lbs/day are incorrect(?). It appears that the data for the Effluent Limitations for lbs/day is incorrect as well.	The errata sheel will correct the tentative Order to include the correct historical effluent limitations and monitoring data in the table.
	Page 8-11, Item 41: Page F-8 – Table 5. Does not include monthly ammonia testing. Not all metals were required quarterly, some were required semiannually.	The errata sheel will correct the tentative Order to indicate that constituents listed with objectives for the protection of human health, with the exception of ammonia and total chlorine residual, were monitored quarterly.
	Page 8-11, Item 45: Page F-23 – E. Performance Goals "These constituents shall also be monitored at M-001," the location should be M-003.	The errata sheet will correct the tentative Order to indicate the correct compliance point for Performance Goals.
	Page 8-11, Item 48: Page F-31 – 2. Establishes near shore stations at 3000 feet seaward. The Ocean Plan states 1000 feet from the shore with no reference to the MLLW.	The errata sheet will correct the tentative Order to remove the reference to "3,000 feet seaward MLLW".

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	Page 8-11, Item 50: Page F-31 – 2. Near Shore Water Quality Monitoring States that station N-2 has at times exceeded the 6 month limit for enterococcus. We found no evidence of this.	The full statement in the Fact Sheet is accurate and states "but this may be due to the less sensitive analytical method used by the Discharger at times to measure enterococcus levels."
	Page 8-11, Item 52: Page F-32 – 3. Offshore Water Quality Monitoring The last paragraph states that the new order only alters the sampling frequency from the old order. This is not true, the sampling frequency remains the same.	The errata sheet will correct the Fact Sheet of the tentative Order to correct the statement.
	Page 8-11, Item 53: Page F-32 – E.1. Benthic Monitoring The first paragraph mentions "during the first and third years of the Order." This should be from July 2008 through June 2009.	The errata sheet will correct the Fact Sheet of the tentative Order to indicate that Benthic Monitoring requirements are for Year 4 of the Order.
	Page 8-11, Item 54: Page F-34 – E.5. Intensive Monitoring The paragraph mentions "for years 2 and 4 of the Order". This should be from July 2008 through June 2009.	The Regional Board intended to require the Discharger to conduct intensive monitoring at the nearshore and off-shore receiving water monitoring stations in Year 4 of the Order and in addition participate in the SCCWRP Bight Study in Year 5 of the Order. The errata sheet will amend the tentative Order to reflect this.
14	Page 8-11, Item 55: Page F-36 – f. Pretreatment Program States that we do not receive discharges from any industries subject to USEPA standards and have no requirement for a pretreatment program. This is not true. We do receive industrial discharges and are required to have a pretreatment program.	The errata sheet will correct the Fact Sheet of the tentative Order to indicate that the Discharger's facilities do receive discharges from industry that are subject to pretreatment standards.

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	Page 12, Items 5, 6, 7, 9, 10 5. Page 36 – Endnotes 9. There is currently no approved method for determining half those compounds. 6. Page A-3 – Composite Sample This definition applies only to certain liquid samples. 7. Page E-7 (Attachment E) – V. WET Testing Requirements. "The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with test results." Seems to be unduly burdensome as this could double the cost of the test. Also, does this apply to only the chronic test or does it include the acute test. 9. Attachment E Endnotes 8 – Specifies use of test method 8280. This test is not an approved method for WW in the CFR, while 1613 is. 10. Page F-30 – Fourth paragraph. See note 7. above.	Comments noted.

Comment #	Comment	Staff Response
Comments received from the Sierra Club San Diego Chapter contained in letter dated May 20, 2005		
15	Item 4 of the submittal letter states that a reasonable potential analysis was conducted. The constituents that do not have a reasonable potential are listed as "performance goals". These constituents are to be monitored for informational purposes only, not compliance. However, the letter does not explain the cases in which these performance goals are exceeded and what steps should be taken. The Order should address these cases.	Performance goals are assigned to constituents that did not indicate reasonable potential and are numerically equal to what would have been effluent limitations for these constituents if reasonable potential had been indicated. As discussed in the Fact Sheet, the inclusion of performance goals forms part of the rationale leading to the conclusion reached by the antidegradation analysis that was conducted to consider the impacts of removing effluent limitations for constituents that did not indicate reasonable potential. The antidegradation analysis concluded that existing water quality in the receiving water is expected to be maintained when performance goals and continued effluent monitoring requirements are included in the permit. The use of performance goals serves to maintain existing treatment levels and effluent quality and supports State and federal antidegradation policies. The performance goals provide all interested parties with information regarding the expected levels of pollutants in the discharge that should not be exceeded in order to maintain the water quality objectives established in the Ocean Plan. Performance goals are not limitations or standards for the regulation of the discharge. Effluent concentrations above the performance goals will not be considered as violations of the permit but serve as red flags that indicate water quality concerns. Repeated red flags may prompt the Regional Board to reopen and amend the permit to replace performance goals for constituents of concern with effluent limitations, or the Regional Board may coordinate such actions with the next permit renewal.

Comment #	Comment	Staff Response
16	Endnotes, Page 37, Par. 12. Typographical error “he” should be “the”.	The errata sheet will reflect the correction.
17	Attachment E- Montioring and Reporting Program. Section D. Benthic Monitoring. Item 2 Infauna on Page E-11 specifies the collection method. Will the Discharger be participating in regional benthic monitoring such as the Bight monitoring? If so then the sampling equipment and monitoring protocols should conform to the Bight requirements.	The Discharger is required to participate in the SCCWRP Bight Study, see Monitoring and Reporting Program (MRP) of the tentative Order, Regional Monitoring Provision H. The Regional Board has considered the comment and determined that additional time is necessary to evaluate the differences between the collection methods. The collection method in the tentative Order is retained until the Regional Board has had adequate time to consider this issue and will amend the MRP as appropriate in the future. The Regional Board intends to revisit the need for improved receiving water monitoring in the near future. Recently, the Southern California Coastal Waster Research Project (SCCWRP) provided the Regional Board guidelines for improving monitoring programs for the Region’s ocean dischargers. The Regional Board will use these guidelines to make appropriate modifications to the receiving water monitoring programs.
18	Attachment C-flow Schematic is blank. Please provide the Flow Schematic.	The flow schematics were inadvertently left out when the tentative Order was first mailed out on May 9, 2005. The flow schematics was made available at the Regional Board’s website at http://www.swrcb.ca.gov/sandiego/misc/oceanside/R9-2005-0136.html on May 12, 2005.

Comment #	Comment	Staff Response
19	Special Studies, Plume Tracking Study page E-13. Page E-10 shows that water temperatures are measured for each station at three depths, at the surface, mid-depth and bottom depth. Are these three temperature measurements at each station sufficient for the plume tracking studies. Will water salinity density) be monitored? Our experience in analyzing the receiving waters monitoring data for the International Wastewater Treatment plant showed the value of the CTD (conductivity, temperature, depth) data obtained by data loggers that provide these data at much closer depth intervals.	The details of the proposed Plume Tracking Study have not been determined and the Regional Board intended the Discharger to coordinate with other state and local agencies to develop and implement the Plume Study. The intensive monitoring for off-shore stations is intended to be independent of the Plume Tracking Study. Nonetheless, the proposed Plume Tracking Study has been removed from the tentative Order (see comment #8 above). The Regional Board agrees that CTD data have greater value than temperature readings at three depths. The errata sheet will revise the off-shore station intensive monitoring requirements (MRP Provision VI. C) to replace temperature monitoring with CTD monitoring at 1 meter intervals.
20	Page F-6. Last line. Provide the correct Table #.	The errata sheet provides the correct table number.
21	Attachment G. Table I has the monthly effluent temperatures. Does the model require ocean water temperatures as a function of depth? Were the receiving waters temperature data at three depths used? Are these sufficient for the visual plumes dilution model to compute a dilution factor with an accuracy that is well below the dilution factor increase from the prior 82 to the revised 87, a change of 6.1%? What are the limits of the inputs to the VPlume model? We raise these questions because the on (sic) Board determined that antidegradation analysis is not required based on the modeling results (page F-28).	Attachment G indicates that monthly receiving water data for July 2003 through June 2004 were used in Visual Plumes. The receiving water data consisted of salinity and temperature data at one-meter intervals at off-shore stations. As indicated in Attachment G, the dilution factors determined varied each month depending on the effluent and receiving water data inputs into the Visual Plumes modeling software. The minimum initial dilution factor of 87 was the lowest dilution factor determined out of the twelve months considered. The previous result of 82 was based on information available at the time of the previous dilution factor modeling. The current minimum dilution factor result of 87 was determined independent of the previous dilution factor.

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		Additional technical information regarding Visual Plumes modeling is available at USEPA's website at http://www.epa.gov/ceampubl/swater/vplume/index.htm. The Regional Board followed the State Water Board's Administrative Procedures Update (July 2, 1990), Antidegradation Policy Implementation for NPDES Permitting. Those procedures allow the Regional Board discretion in conducting the full antidegration analysis when initial assessment of the situation indicates that lowering of water quality is not significant and not expected to cause adverse effects to the overall receiving water body.
22	Given these concerns, we strongly recommend that receiving water frequency be increased to yearly rather than at year 4 as noted in Tables 16 and 17 in order to evaluate the potential impacts compared with the historical sediment and benthic data.	The Regional Board does not agree that the concerns raised by the commenter justify increasing the frequency of benthic sediment and infauna monitoring to yearly. The errata sheet does revise the benthic sediment and infauna monitoring requirements contained in the tentative Order to match the benthic sediment and infauna monitoring requirements contained in the Discharger's previous permit Order No. 2000-011. The revisions increase monitoring frequency to semiannual monitoring for certain sediment constituents and infauna benthic biota.

Comment #	Comment	Staff Response
Comments received from Latham & Watkins on behalf of Hydranautics contained in letter dated July 20, 2005		
	Contained in the Revised Permit is an effluent limitation and monitoring requirement for acute toxicity. We represent Hydranautics, a membrane manufacturing firm which discharges to the City's wastewater treatment plant. Hydranautics believes this effluent limitation is unnecessary, redundant, and has no basis in the Clean Water Act or the Porter-Cologne Water Quality Cont Act. To require it will divert public funds from other important civic projects by forcing the City expend funds on testing Hydranautics believes to be of little or no environmental benefit. The information that Hydranautics believes warrants the elimination of this effluent limitation from the Revised Permit is explained in the enclosed specific comments and its attachments.	Comment noted. See responses below.
23	<u>Based On Plant's Dilution Factors, Only Chronic Toxicity Testing Should Be Required</u> Acute toxicity testing is not required under California law or regulations. The 2001/2005 California Ocean Plan ("Ocean Plan") assumes that there is no reasonable potential for acute toxicity excursions at the City's dilution factors. Chapter III, Section C, (3)(c) of the Ocean states: (1) Dischargers shall conduct acute toxicity testing if the minimum initial dilution of the effluent is greater than 1,000:1 at the edge of the mixing zone. (2) Dischargers shall conduct either acute or chronic toxicity testing if the minimum initial dilution ranges from 350:1 to 1,000:1 depending on the specific discharge conditions. The [Regional Board] shall make this determination.	The 2001 Ocean Plan established an acute toxicity water quality objective as well as a schedule for toxicity monitoring based on dilution factors. The Regional Board understands the 2001 Ocean Plan as establishing a criteria for when dischargers will be required to monitor for acute toxicity and chronic toxicity based on dilution factors but not a criteria establishing when an acute toxicity or chronic toxicity effluent limitation may be included in the permit. The need for a water quality based effluent limitation is determined with a reasonable potential analysis. Similarly, the TSD criteria for toxicity monitoring only addresses when acute and/or chronic toxicity monitoring may be required, and the TSD recommends a reasonable potential analysis for the determination of the need for toxicity effluent limitations.

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	(3) Dischargers shall conduct chronic toxicity testing for ocean waste discharges with minimum initial dilution factors ranging from 100:1 to 350:1. The [Regional Boards] may require that acute toxicity testing be conducted in addition to chronic as necessary for the protection of beneficial uses of ocean waters. (4) Dischargers shall conduct chronic toxicity testing if the minimum initial dilution of the effluent falls below 100:1 at the edge of the mixing zone. Dilution factors at the Plant have generally been in the 80:1 to 85:1 range. The Regional Board determined the minimum initial dilution factor to be 87:1 for the discharge of up to 29.055 MGD of effluent from the Plant. Tentative Order, F-6. Because the minimum initial dilution is below 100:1, toxicity testing requirements are governed by section (4) above, and the Region Board may only require the chronic toxicity test, not the acute toxicity test. Acute toxicity testing at this dilution factor is also not required under federal criteria. The United States Environmental Protection Agency ("EPA") recommends that a discharger conduct only chronic toxicity testing if the dilution of the effluent falls below 100:1 at the end of the mixing zone. EPA, Technical Support Document for Water Quality-based Toxics Con (March 1991), 58. Therefore, under both federal and state guidelines based on initial dilution, chronic toxicity testing, rather than acute toxicity testing, is required.	
24	<u>Reasonable Potential Analysis Calculation from April 2005 Amendment to 2001/200 Ocean Plan Determines Effluent Limitation Not Required for Acute Toxicity</u> Not only is a water quality-based effluent limitation for acute toxicity not supported by dilution factors, the Reasonable	The acute toxicity effluent limitation in the tentative Order was based on results of a reasonable potential analysis (RPA) using acute toxicity data obtained using freshwater test organisms as specified by the Discharger's previous permit, Order No. 2000-011.

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	Potential Analysis also counsels that an effluent limitation is required for acute toxicity. In April 2005, the State Water Resources Control Board ("SWRCB") amended the Ocean Plan to include a procedure Regional Boards should use to determine whether Table B pollutants have a reasonable potential to exceed water quality objectives, and whether a water quality-based effluent limitation is needed for individual pollutants. Acute toxicity is a Table B Pollutant. Appendix VI of the revised Ocean Plan outlines the procedure for evaluating whether there is reasonable potential to exceed water quality objectives. The SWRCB website also provides a link to the Ocean Plan Reasonable Potential Analysis Calculator ("RPCalc") which runs the logarithmic equation described in Appendix VI, and generates a Reasonable Potential Analysis graph detailing the outcome of the calculation, including a conclusion whether testing is required for that pollutant. The current Plant permit requires acute toxicity testing of the City's effluent using fresh water species, despite the fact that the Plant discharges into the ocean. This permit contains instantaneous maximum, weekly average, and 30-day average limits. The Revised Permit, based on the new 2001/2005 Ocean Plan including the April 2005 amendment, requires that marine species be used for acute toxicity testing and contains a daily maximum limit for acute toxicity. Hydranautics' consultant analyzed historical plant effluent data and the Revised Permit acute toxicity limit using RPCalc. Using data from the City, the program determined that the Reasonable Potential Analysis outcome was Endpoint 2: "<u>An effluent limitation is not required for the pollutant</u>." Therefore, there is not a reasonable potential for the discharge to exceed t Ocean Plan's water quality	Ideally, the acute toxicity RPA would be conducted with data obtained using marine test species as now required by the 2001 Ocean Plan; however, no marine test species data is available. RPA was conducted using RPCalc 2.0, a software tool developed by the State Water Board which implements the RPA procedures of the Ocean Plan. A software "bug" was identified in the process of conducting the RPA for acute toxicity. The "bug" causes the text output of RPcalc to indicate "Endpoint 2" (i.e. reasonable potential is not indicated) in certain circumstances although the corresponding "Rationale" discussion in the text output and the graphical output correctly indicate that there is reasonable potential. The software "bug" has been brought to the attention of the State Water Board. The Regional Board agrees that RPcalc correctly indicates Endpoint 2 (no reasonable potential), unaffected by the software bug, when only data from July 2003 through June 2005 is used. It is for similar reasons, based on RPA conducted using data from June 2003 through May 2005, that the acute toxicity effluent limitation will be removed from the tentative Order (see Errata Sheet). Additional discussion of the removal of the acute toxicity effluent limitation can be found in the response to Comment # 11.

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	objective for acute toxicity. This finding was consistent whether data used was from January 1999 through December 2002 (data set used by the Regional Board in their analysis), January 1999 through June 2005 (all available data), or July 2003 through June 2005 (the last three years of data). The data used to run these calculations is included in Attachment "A," and the graph generated by the RPCalc showing this result for all available data is provided in Attachment "B." Thus, according to both the dilution factors and the revised Ocean Plan's Reasonable Potential Analysis, an acute toxicity effluent limitation should not be included in the Revised Permit; rather, the Revised Permit should require chronic toxicity testing.	
25	Additional Reasonable Potential Analysis Factors in the Ocean Plan Further Indicate that an Acute Toxicity Effluent Limitation Is Not Required The SWRCB provided the Regional Boards with a list of factors the Regional Boards should use to determine, based on their best professional judgment, whether an effluent limitation is needed for a Table B pollutant if the Regional Boards had no data or insufficient data to run the Reasonable Potential Analysis calculation. Appendix VI, Step 13 of the revised Ocean Plan states that information which may be used to conduct a Reasonable Potential Analysis based on Best Professional Judgment include the facility type; the discharge type; solids loading analysis; lack of dilution; history of compliance problems; potential toxic impact of discharge; fish tissue residue data; water quality and beneficial uses of the receiving water; CWA 303(d) listing for the pollutant, the presence of endangered or threatened species or critical habitat, and other information." All relevant factors suggest that an acute	Comment noted

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	toxicity effluent limitation need not be developed. Each of these factor; discussed below.	
26	*Facility Type* The Plant is a publicly owned treatment works owned by the City, and has been in operation for many years. Hydranautics shares the Regional Board's commitment to the environment and to water quality in California. Because of this commitment to the environment, Hydranautics appreciates the importance of compliance with environmental permits, including the Revised Permit. However, in this instance, Hydranautics feels that an acute toxicity effluent limitation is unnecessary. To require it will reduce the City's ability to provide funding to other important civic projects by forcing the City to expend funds on testing that is not required based on the Plant's dilution factors, the Reasonable Potential Analysis Calculation, and other factors discussed below. Further, the chronic toxicity test is far more stringent than (and indeed, largely subsumes) the acute toxicity test.	Under the Discharger's previous permit, Order No. 2000-011, the Discharger was required to monitor for acute toxicity every month. The tentative Order requires quarterly monitoring for acute toxicity which represent a reduction in frequency from the monthly monitoring requirement. The errata sheet further reduces the acute toxicity monitoring requirement to semiannually in light of the removal of the acute toxicity effluent limitation.
27	*Discharge Type* The discharge type has not materially changed since the last NPDES permit was issue for the Plant. *Solids Loading Analysis* This is not a sediment or solids related issue; thus, this factor is not applicable.	Comments noted.

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28	*Lack of Dilution* As discussed above, there is an 87:1 dilution factor at the Plant. Under both state and federal regulations, there is no reasonable potential for acute toxicity excursions at this dilutic factor. Also, as discussed above, Chapter III, Section C of the Ocean Plan states: (1) Dischargers shall conduct acute toxicity testing if the minimum initial dilution of the effluent is greater than 1,000:1 at the edge of the mixing zone. (2) Dischargers shall conduct either acute or chronic toxicity testing if the minimum initial dilution ranges from 350:1 to 1,000:1 depending on the specific discharge conditions. The [Regional Board] shall make. this determination. (3) Dischargers shall conduct chronic toxicity testing for ocean waste discharges with minimum initial dilution factors ranging from 100:1 to 350: l. The [Regional Boards] may require that acute toxicity testing be conducted in addition to chronic as necessary for the protection of beneficial uses of ocean waters. (4) Dischargers shall conduct chronic toxicity testing if the minimum initial dilution of the effluent falls below 100:1 at the edge of the mixing zone. Dilution factors at the Plant have generally been in the 80:1 to 85:1 range. The Regional Board determined the minimum initial dilution factor to be 87:1 for the discharge of up to 29. MGD of effluent from the Plant. Tentative Order, F-6. Therefore, the Regional Board should apply only the chronic toxicity test to the Plant effluent. Acute toxicity testing at this dilution factor is also not required under federal criteria. The EPA recommends that a discharger conduct only chronic toxicity testing if the	The 2001 Ocean Plan established an acute toxicity water quality objective as well as criteria for when toxicity monitoring will be required. The Regional Board understands the 2001 Ocean Plan as establishing criteria based on dilution factors for when dischargers will be required to monitor for acute toxicity and chronic toxicity but not criteria establishing when an acute toxicity or chronic toxicity effluent limitation may be included in the permit. The need for a water quality based effluent limitation is determined with a reasonable potential analysis. Similarly, the TSD criteria for toxicity monitoring only addresses when acute and/or chronic toxicity monitoring may be required, and the TSD recommends a reasonable potential analysis for the determination of the need for toxicity effluent limitations.

Comment #	Comment	Staff Response
	dilution of the effluent falls below 100:1 at the edge of the mixing zone. EPA, Technical Support Document for Water Quality-based Toxics Control (March 1991), 58. Hence, this factor dictates that chronic toxicity testing should be required rather than acute.	
29	*History of Compliance Problems* The Plant's few past exceedances of the acute toxicity limits based on the 1997 Ocean Plan are historical, irrelevant, and cannot suggest a "reasonable potential" that the City will fail to meet the 2001 Ocean Plan acute toxicity water quality objectives. The 1997 Ocean Plan was replaced by the 2001 Ocean Plan. Among other revisions, the 2001 Ocean Plan replaced the acute toxicity effluent limitation with an acute toxicity water quality objective. The state found, and EPA agreed, that this methodology was more reflective of actual conditions in the ocean, whereas the previous testing methodology had been artificial. Under the 1997 Ocean Plan, the acute toxicity effluent limitation was a measure of toxicity at the end of the pipe. Freshwater test species were used. The 2001/2005 test methodology utilizes a receiving water objective, intended to assess acute toxicity impacts of discharges to the Pacific Ocean using marine test species. The purpose of this change was to "properly evaluate effects of the discharge upon the receiving water." Final Functional Equivalent Document, Sept 1, 2000, 17 ("FFED"). The old test method was replaced in part because the SWRCB recognized that it overstated the impacts of ammonia. FFED, 11. The change to acute toxicity testing in the 2001 Ocean Plan was a complete overhaul of the testing methodology.	Comment noted.

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	Because the tests are materially different, the test results of one cannot be used to accurately predict the test results of the other. In early 2003, over a brief period, the Plant exceeded the acute toxicity tests on only two occasions. The City attributed the excursions to ammonia. During this time and since, the Plant effluent has passed all chronic toxicity tests. Typical ammonia concentration in the City's discharge is less than half the total limit and is significantly below the Ocean Plan's ammonia toxicity threshold. Freshwater species are more susceptible to ammonia than are marine species. Thus, historical exceedances cited by Regional Board were based on a more susceptible species than the current test utilizes, and are not indicative of the likelihood of meeting the current limit based on marine species (which is reasonable because the present discharge is to a marine environment, not a freshwater environment). These historical exceedances are therefore insufficient to create a "reasonable potential that the City will exceed water quality objectives for acute toxicity. Acute toxicity has not been exceeded under the current permit for two years. Even then, those exceedances were based on the more susceptible freshwater species, and were likely caused by ammonia, which essentially has been found to create false positives for acute toxicity where ammonia is present. Finally, discussed below, the chronic toxicity testing the Plant will be instituting is more stringent and largely subsumes acute toxicity testing.	

Comment #	Comment	Staff Response
30	*Potential Toxic Impact of Discharge* Not setting effluent limitations for acute toxicity will not result in the discharge having toxic impact. The purpose of the 2001/2005 Ocean Plan amendments and revised test methodology was to "properly evaluate effects of the discharge upon the receiving water." FFED, 17. The SWRCB found that this new methodology was more reflective of actual conditions in the ocean, whereas the previous testing methodology had been artificial. Further, the old test method was replaced in part because the SWRCB recognized that it overstated the impacts of ammonia--suggesting that a discharge would be toxic when no such toxicity actually would exist in the marine environment where the discharge occurs. FFED, 11. The City has concluded that the few acute toxicity tests it failed under the 1997 Ocean Plan method likely failed due to ammonia. The City's previous permit had a discharge limit for ammonia of 50 mg/d. By definition, the City's calculated ammonia limit after dilution is protective of the marine environment. The typical ammonia concentration in the City's discharge, is 19-25 mg/L, less than half the total limit.	Whole effluent toxicity assesses the toxicity of effluents that may contain several constituents whose toxic effects are additive, synergistic, or antagonistic although each constituent may not be present in amounts that would be toxic by itself. The fact that ammonia concentrations in the Discharger's effluent were less than half of the total limit suggest that ammonia may be the major contributor of toxicity but not the sole cause of toxicity, and other constituents may be present to contribute toxicity.

Comment #	Comment	Staff Response
31	*Fish Tissue Residue Data* Fish Tissue Residue Data is irrelevant for acute toxicity. *Water Quality and Beneficial Uses of the Receiving Water and CWA 303(d) Listing for the Pollutant* There are specified beneficial uses of the Pacific Ocean, and the receiving waters in the vicinity of the Plant's discharge point are not included on the current 303(d) list. *Presence of Endangered or Threatened Species or Critical Habitat* There are no endangered or threatened species or critical habitat at the outfall of the Plant identified in the Revised Permit	Comments noted.
32	*Other Information* <u>Regional Board Must Consider Economic Effect on City Before Requiring Acute Toxicity Effluent Limitation</u> If the Regional Board was inclined to impose an acute toxicity effluent limitation, which we believe they cannot reasonably do, the Regional Board failed to take into account the economic effect this would have on the City, a factor which they are required to consider and recent California Supreme Court ruling. City of Burbank v. State Water Resources Control Board held that under state law a Regional Board must take into account economic considerations (including the cost of compliance) when adopting a discharge standard that exceeds the applicable federal standard under section 13263 and 13241 of the Porter-Cologne Act. <u>City of Burbank v. State Water Resources Control Board</u>, Cal.4th_ BS060957 (April 4, 2005). As a result, the Regional Boards are obligated to consider the costs of compliance when	Comments noted.

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	deciding whether to establish requirements that are more stringent than federal requirements. This is the case irrespective of whether those more stringent requirements are narrative or numeric. Requiring the acute toxicity effluent limitation is more stringent than what is required by the federal government. EPA recommends that a discharger conduct chronic toxicity testing, acute toxicity testing, if the dilution of the effluent falls below 100:1 at the edge of the mixing zone. United States Environmental Protection Agency, Technical Support Document for Water Quality-based Toxics Control (March 1991), 58. Performing acute toxicity would be extraordinarily expensive for the City and is unnecessary as the SWRCB has determined that the 2001 Ocean Plan acute toxicity testing standards are more protective of beneficial uses of the ocean than were the 1997 standards sin the 2001 standards are more reflective of actual ocean conditions and less artificial than the 1997 standards. Further, the SWRCB provided the Regional Boards with a calculation to determine whether or not a reasonable potential exists, and as noted above, the outcome of that calculation in this case is that an acute toxicity effluent limitation is unnecessary. <u>Requiring Both Acute and Chronic Testing for the Plant is Redundant</u> Chronic toxicity testing is universally viewed as the more stringent of the two toxicity; tests. The City consistently passes chronic toxicity testing. The City allegedly believes the only reason it has very occasionally failed acute toxicity testing is because of ammonia. The City is not exceeding the ammonia levels in its permit. Further, requiring both acute and chronic toxicity testing in this case is redundant. The chronic toxicity testing will	

Comment #	Comment	Staff Response
	provide environmentally protective limitations on the Plant's discharge.	
34	<u>Removing Acute Toxicity Testing Requirement Will Not Violate the Anti-Degradation Policy</u> Removing the requirement of acute toxicity testing from the Revised Permit will not violate the anti-degradation policy. Anti- Degradation requirements are outlined in 40 C.F.R §131.12. Federal anti-degradation requirements are triggered only by a lowering of water quality. As noted above, federal and state dilution ratios and the SWRCB's RPCalc all indicate that an effluent limitation for acute toxicity is unnecessary. The replacement of the 1997 technology-based acute toxicity effluent limitations with an acute toxicity water quality objective does not result in a lowering of water quality. The change was made because the state felt, and the federal government agreed, that it was more reflective of actual ocean conditions. FFED, 26. <u>Removing Acute Toxicity Test Will Not Violate Anti-Backsliding</u> The SWRCB replaced technology-based acute toxicity limitations with, assuming reasonable potential, water quality based limits. SWRCB has explicitly stated, "This approach is not subject to anti-backsliding restrictions." FFED, 27. Further, EPA approved the 2001/2005 Ocean Plan, based on [its] finding that the approved amendments are consistent with the requirements of the Clean Water Act and EPA's regulations at 40 CFR 131.5 and 131.6.	Comments noted.

Comment #	Comment	Staff Response
35	Conclusion In light of the numerous factors discussed herein, Hydranautics requests that the acute toxicity effluent limit be removed from the Revised Permit, and that chronic toxicity effluent limits remain in the permit. Hydranautics requests an opportunity to meet with Regional Board staff to discuss the issues addressed in this letter. Please advise as to the Regional Board's availability for such a meeting.	Comment noted.
Comments received from USEPA Region IX contained in letter dated August 3, 2005		
	We have reviewed the tentative orders for the Fallbrook Public Utilities District, Wastewater Treatment Plant No. 1 (tentative Order No. R9-2005-0137, NPDES Permit No. CA0108031) and the City of Oceanside, San Luis Rey and La Salina Wastewater Treatment Plants (tentative Order No. R9-2005-0136, NPDES Permit No. CA0107433). We believe that various changes are necessary to ensure that the permits properly regulate the permittees' sewage collection systems in accordance with Clean Water Act and NPDES requirements. Our primary areas of concern are the Board's treatment of collection system requirements and provisions VII.N. and VII.O. in the Compliance Determination sections of the draft permits.	Comment noted.
	Collection Systems: In the Findings sections of the draft permits, the Regional Board properly defines the permitted facilities to include the permittees' sanitary sewage collection systems as well as the treatment plants and outfalls. In the Special Provisions sections of the draft permits, though, the collection systems are excluded from a number of important requirements. However, collection systems are part of the POTW and	The Regional Board has held the position that the sewage collection system is covered by the NPDES regulations implemented in waste discharge requirements issued to entities that own and operate wastewater treatment plants and disposal facilities when the same entity owns and operates the sewage collection system. In the tentative Order, the Regional Board intended the sewage collection system to be

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	subject to Standard Federal NPDES provisions such as those requiring proper operation and maintenance (40 CFR 122.41(e)) and reporting of noncompliance (40 CFR 122.41(l)(6) and (7)). Consequently, paragraphs VI.C.2.b. and c. of the draft Fallbrook permit and paragraphs VI.C.2.c. and d. of the draft Oceanside permit (in which the collection systems are excluded from requirements to develop spill prevention and response plans and to report sanitary sewer overflows (SSOs)) are not consistent with NPDES requirements. It appears that the exclusions were made to eliminate overlap with the Board's general non-NPDES Waste Discharge Requirement 96-04 for wastewater collection systems. Although there may be other ways for the Board to correct the deficiency in the draft permits, one clear resolution would be for the Board to incorporate the WDR 96-04 spill reporting and spill prevention and response plan requirements into the NPDES permits. Lastly, the fact sheets and findings sections of the permits should be changed to reflect the modifications requested above and clarify that the permitted facilities include the collection systems.	subject to the more general Standard Federal NPDES provisions such as those requiring proper operation and maintenance and reporting of noncompliance while including special provisions that only applied to the wastewater treatment plant and disposal facilities and spills other than sanitary sewer overflows. The Regional Board's Order No. 96-04, General Waste Discharge Requirements Prohibiting Sanitary Sewer Over flows by Sewage Collection Agencies, apply to publicy-owned sewage collection agencies. Order No. 96-04 prohibits all sanitary sewer overflows (SSOs) and includes requires sewage collection agencies to develop SSO prevention and response plans and to report SSOs. Order No. 96-04 is not an NPDES permit. The Regional Board recognizes that the Special Provisions of the tentative Order create an appearance of excluding the sewage collection system from coverage under the NPDES permit and causes confusion; therefore, the Regional Board will modify the tentative of Order to correct this situation. The errata sheet will remove the requirements to develop spill prevention and response plans for spills. Removal of that special provision still requires the Discharger to comply with the Standard federal provision for proper operation and maintenance. The errata sheet will also incorporate the Monitoring and Reporting Program of Order No. 96-04 by reference to complement the special provision of the tentative Order for spill reporting.

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	Compliance Determination: In the Compliance Determination section of the draft permits, Paragraph VII.O. read in conjunction with Paragraph VII.N. suggests that only violations of the permits' Surface Water Discharge Prohibitions are Clean Water Act violations, i.e., that discharges to land do not violate the Clean Water Act. These provisions should be deleted for several reasons. First, the blanket assertion that discharges to land do not (or cannot) be violations of the Clean Water Act is incorrect. For example, discharges to land may result from noncompliance with permit provisions that require the permittee to properly operate and maintain the Publicly Owned Treatment Works (provisions that are required as part of the federal approval of California's program to administer the Clean Water Act under State law). Second, as a practical matter, given the Clean Water Act's admonition to provide for, encourage, and assist public participation in the enforcement of any standard or effluent limitation established by a State under the Clean Water Act, the justification of the purported exclusion in Paragraph VII.O. (to remove the permittees' potential liability from third party lawsuits) is not appropriate. Third, determinations about whether a discharge violates the Clean Water Act and/or a permit are appropriately made on a case by case basis. Further, under Clean Water Act section 309, the State cannot limit EPA's enforcement authority regarding NPDES permits. Again, please change the Fact Sheet to accord with the permit changes.	The Regional Board agrees with the comment. The Regional Board, on advice of Regional Board counsel, has concluded that it is appropriate to delete Compliance Determination Provisions VII.N and VII.O of the tentative Order. The errata sheet will reflect the removal of those provisions.

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	Finally, the undefined term “surface water” is used in several permit provisions. To be consistent with the Clean Water Act, the term “surface water” should be changed to “Waters of the United States.”	The Regional Board agrees with the comment. The errata sheet to the tentative Order will include a definition of “surface water” which includes “waters of the United States” as used in the federal Clean Water Act (40 CFR 122.2).